admit the atrophy, but deny the importance of the fungus. The contagiousness of alopecia areata is very positively denied by some authorities. Dr. Anderson thinks he has seen evidences of it.

Pityriasis versicolor is treated of in Chapter IX. It is a pity that the term *chloasma* has not been universally adopted for this affection (characterized by patches of discoloration owing to the grape-cluster-like *microsporon furfur*), to distinguish it from pityriasis proper. We regret, also, that, as Dr. Anderson has chosen to use a term so nearly identical with the same for *morbus pediculosus*, he did not give it the equally correct spelling: phtheiriasis, instead of phthiriasis. In sympathy for our juniors, at least, we must protest against any *unnecessary* complication or obscurity in the nomenclature of skin diseases, already difficult enough.

Plica polonica is not recognized by our author as a special disease. Like Hebra, he believes it to be nothing more than a dirty skin, upon which the hair is matted from neglect; this affording conditions for the detention of spores of fungi floating through the air. We should depend more positively upon this opinion if it were, like most of those in this book, supported by the author's own immediate observations.

The last three chapters of the volume contain a full and interesting account of scabies. In regard to its symptomatology he objects with emphasis to the erroneous account given in popular works of the ordinary scabious eruption; which, instead of being most frequently *vesicular*, as it is described, is much more often papular or pruriginous, or even ecthymatous; although, as it depends chiefly upon scratching, it may assume almost any character.

In the treatment of scabies, Hardy's plan, by which the disease may be eradicated in a single day, is considered by the author as rather inconvenient or undesirable in private practice. It consists in rubbing the patient all over for half an hour with black soap, after which he is kept the same length of time in a warm-bath, and then anointed with a modification of the pomade of Helmerich, as follows: ℞—Subcarbonatis potassæ, ʒj; sulphuris, ʒij; axungiæ, ʒxij. The course is ended by a second warm bath the next day to remove the ointment.

Vleminckz, of Belgium, recommends a milder preparation, viz.: ℞—Calcis, ℥ss; sulphuris, ℥j; aquæ, ℥viij. This is boiled, stirred, and passed through a sieve before using.

A page upon the *acarus folliculorum*, containing a denial of the importance of this parasite in the production of acne, terminates Dr. Anderson's book, with which we think all readers interested in its subject will be pleased, even if they do not accept all his conclusions. H. H.

ART. XXIII.—*Epileptic and other Convulsive Affections of the Nervous System; their Pathology and Treatment.* By CHARLES BLAND RADCLIFFE, M. D., etc. etc. Third edition. London, 1861. 12mo. pp. 312.

THE first two editions of the work of Dr. Radcliffe were very fully noticed by us at the time of their appearance respectively. In the one before us the entire treatise has been, in the words of the author, "so re-written and re-cast," as to make it, to a very great extent, "a new book rather than a new edition." In it Dr. R. has incorporated the Gulstonian Lectures, delivered by him at the Royal College of Physicians, in the spring of 1860; the theme of which, together with all the author's additional thought and experience of the last three years, is directed to the enforcement and illustration of the views promulgated by him in reference to the physiology of muscular action, and the pathology thence deduced of the convulsive affections generally, from the simplest tremor to the most violent epileptic seizure.

Our readers are aware that, according to Dr. R., relaxation or elongation is the active state of the muscles, while contraction or shortening is their passive condition. He believes that there is a condition of polarity in the living muscle during relaxation, by which the state of *relaxation is produced*, and that the state of contraction is nothing more than the necessary result of the muscle being released from its condition of polarity, and left to the operation of the attractive force which is inherent in the physical constitution of the muscular molecules. The transitory contractions which are said to belong to that form of contractility usually denominated irritability, Dr. R. supposes to occur during transitory lulls in the polar action which antagonizes contraction; while the prolonged contraction of *rigor mortis*, which is referred to that form of contractility denominated *tonicity*, he believes to derive its characteristic persistency from the fact that the polar action which antagonizes contraction is then at an end.

Dr. R. denies that the blood is in any sense to be viewed as a direct cause of muscular contraction, whether this be manifested normally or abnormally; on the contrary, it seems to him that the influence of the blood is exercised, most commonly, if not invariably, in producing the opposite state of relaxation.

"There is," he remarks, "every reason to believe that the living nerve consists of an infinite number of electro-motive molecules, and that the nerve-current is the sum of the action of these molecules. There is every reason to believe that the activity of the nerve-current is in proportion to the number and energy of these molecules, and that any change of the nerve-current in any part of the nerve will make itself felt, without loss of time, in every part of the nerve, provided the nerve retain its properties as a conductor. There is every reason to believe, also, that the nerve-current cannot begin or end, or experience any change of intensity, without immediately giving rise to the development of instantaneous currents of high tension in the nerve itself (*extra currents*), and in the neighbourhood of the nerve (induced currents). In short, there is every reason to believe that the nerve-current will behave in all respects like the galvanic current, for these two currents are analogous, if not identical, in all their characters."

"The view which is here taken of the operation of electricity in muscular action is indeed," he remarks in a later section, "one which supports and explains what has been already said respecting the operation of blood and nervous influence in muscular motion. That the blood should antagonize contraction is to be expected if the nerve and muscular currents have the power of producing this effect; for it may be supposed that the chemical changes which are wrought by arterial blood in muscle and nerve are as inseparable from the nerve and muscular currents, as the chemical changes in the galvanic cell are inseparable from the galvanic current. And that nervous influence should antagonize contraction, is, assuredly, no matter of wonder; if this be the action of the nerve-current. Nay, if this be the action of the nerve-current, it follows that nervous influence must antagonize contraction, for the nerve-current is a component part of, and the most intelligible idea in, nervous influence. Electrically considered, indeed, the operation of nervous influence in muscular motion becomes not a little simplified. Thus, for example, it is not difficult to understand that convulsion may be brought about by arresting the supply of arterial blood to one or more of the nervous centres of the head, and that in the case of death this convulsion should be separated from the final contraction of rigor mortis, by an interval of relaxation. For may it not be assumed—that the electrical activity of these centres will fail when arterial blood is withheld—that this failure will tell upon the whole nervous system, and set up a movement in the nerve-current which will lead to the induction of instantaneous currents of high tension in the muscles and elsewhere in the neighbourhood of the nerves—that a succession of these induced currents will be developed so long as the nerve-current is oscillating towards the lower level, which it is obliged to settle into for want of arterial blood—that convulsion will result from the action of these induced currents upon the muscular fibres—that relaxation will follow the convulsion when the induced currents cease to be developed, because the muscles will be then left to the undisturbed operation of the muscular and nerve currents—and that rigor mortis will come on eventually, because these currents are then extinguished? And does not the fact that an incitable muscle is more prone to contract when it is cut off from the influence of the nervous centres, or when it is deprived of a portion of its proper supply of blood, become somewhat less unintelligible when the idea of the nerve-current is substituted for that of nervous influence, and when the arterial blood is supposed to act by producing the nerve and muscular currents? For if these currents antagonize contraction, it will follow, as a matter of course, that there must be a greater proneness to contraction when a large amount of nerve-current is cut off by separating the muscles more or less completely from the nervous centres, or when a diminished supply of arterial blood necessitates a more scanty development of the nerve and muscular currents."

The foregoing views are not merely stated, by Dr. R., but are carefully compared with the facts in our possession bearing upon the physiology of muscular action, and its several abnormal conditions—tremor, simple convulsion, epileptiform convulsion, and spasm—and with the results of the action upon the muscles, of electricity and galvanism, as tested by a series of apparently well devised and carefully conducted experiments. If he can not be said to have established, beyond a reasonable doubt, the leading physiological and pathological principles for which he contends, it must, at least, be confessed that he has placed them in a very favourable point of view and clothed them with a degree of probability greater than would be supposed possible at first sight.

As a necessary deduction from his theory of muscular action, Dr. R. refers all of the convulsive and spasmodic affections to defective or disturbed innervation. Among their predisposing causes he includes everything which interferes with perfect hæmatosis—by the interruption of digestion and nutrition, of the regular action of the various excretory organs, and of the freedom of respiration. Everything, in fact, which has a tendency to impair the crasis of the arterial blood, and thus diminish or remove the natural excitant of the nervous centres—the proper sustainer of the normal condition of the nerve-currents. He recognizes, also, the fact that convulsions are the result of various diseases, all of which will be found, he attempts to show, to impair the functional activity of the nervous centres, either by reducing in them a vigorous circulation of arterial blood, or by causing an actual lesion of their organization.

As in the different varieties of tremor and convulsion, so, also, in the different varieties of spasm Dr. R. has attempted to show, from a careful review of all the facts connected with their history and pathological anatomy, that the common supposition that the muscles are provoked to take on this condition of morbid contraction by excessive stimulation of one kind or other is erroneous, but that their state of spasticity is due to want of vigour in the circulation and defective innervation.

The entire chapter on the treatment of ordinary epilepsy is replete with important suggestions of a strictly practical character, presented as the results of actual experience. It furnishes the groundwork of the therapeutics adapted to all the forms of convulsion and spasm. Every portion of it is of interest to the practitioner; we can only afford room, however, for the important suggestions thrown out by the author at its close.

Reflecting, Dr. R. remarks, upon the physiological and pathological premises laid down, the great desideratum in a case of epilepsy would seem to be the production of a more vigorous and sustained action of the nervous centres, convulsion being, according to these premises, the consequence of a failure in this action. Reflecting upon what he has said respecting the beneficial influence of cod-liver oil in epilepsy, and upon the possibility that this remedy may do good by furnishing one of the materials, namely, the fat, which is necessary to the full nutrition of the nervous tissue; it may be readily supposed that the remedy which has yet to be applied in cases of convulsion, is one which will supply in the first place this kind of food to the nervous system. But, he inquires, may there not be some other material besides fat or oil which may be wanted to secure the healthy nutrition of the nervous system? However mysterious are the properties of that system, this much is plain enough—that the nervous tissue cannot exist independently of proper nutrition, and that any means which will merely rouse its action, without at the same time providing for its nutrition, must in the end do harm, and not good. On examining the chemical constitution of nervous tissue, it is evident that phosphorus is a very important ingredient. It is evident, too, that the amount of fat and phosphorus has some relation to the activity of the nervous centres. for both these ingredients increase from infancy to adult age, and decrease afterwards, as the influence of advancing age tells upon the system. "The facts, indeed, are well calculated to suggest the question whether phosphorus may not be as necessary as fat to the proper nutrition of a weak nervous system—as necessary as iron where there is a deficiency of red corpuscles in the blood; and this question once put, would seem to require an answer in the affirmative." Given in medicinal doses, Dr. R. has seen enough, he tells us, to know that the remedy may be given with the unmistakable promise of real and substantial good. The form in which he has prescribed the phosphorus is by dissolving grs. xij in one ounce of almond oil, by the aid of warm water, of which the dose is from five to ten minims. He has also given the phosphorated oil along with cod-liver oil, in a little orange wine, say five to ten minims of the first, to from two to four drachms of the second, twice or thrice a day.

Dr. R. believes, also, that a continuous galvanic current applied along the spinal cord, by means of a modification of Pulvermacher's electric band, may be an important help towards recovery in the case of some epileptics, though not, perhaps, in all.

From a careful study of the entire treatise we are persuaded that, even while the author's peculiar physiological views may not be received in their full extent, hints will be acquired in relation to the nature and causation of convulsive diseases generally, which cannot fail to lead to a rational therapeutics, and to a much greater success, both in their prevention and in their cure, than we can now boast of. D. F. C.

Art. XXIV.—*Lectures on the Diseases of Women.* By Charles West, M.D., etc. etc. Second American from the Second London Edition. Philadelphia: Blanchard & Lea, 1861. 8vo. pp. 483.

The volume before us comprises the revised edition of the portion of Dr. West's lectures first published in 1856, with those which have subsequently appeared, containing the author's account of the diseases of the uterine appendages—of the female bladder and urethra—the vagina and external sexual organs.

These lectures, thirty-three in number, present a series of instructions upon the leading sexual diseases of women, those, at least, occurring out of the periods of pregnancy, parturition and childbed; instructions which are especially valuable because of the caution and perfect candour evinced in their preparation and enunciation—the talents and experience of the lecturer, and the wide discrepancy of opinion which still exists among practitioners of eminence in regard to the true character and pathology and the proper treatment of certain of these diseases, reputed to be of great frequency.

There is a peculiar feeling of security and satisfaction experienced in the study of the writings of Dr. West, which we fear is not realized. to the same extent at least, in the perusal of the productions of very many of those whose reputation as medical teachers may even, perhaps, exceed that of our present author—a security and satisfaction arising from the conviction that his sole aim is truth—that he deals, as far as in him lies, with facts accurately stated, and in no instance intentionally perverted from their legitimate bearing to establish some favourite theory or practice.

While Dr. West makes free use of the labours of others occupied in the same field of inquiry with himself, so far as these are available for his purpose, his leading deductions are drawn, in great part, from his own personal observations. It is this, taken in connection with the ample field he has so long enjoyed for the clinical investigation of most of the diseases of which he treats, and with his habits of close investigation and careful analysis, which gives to his teachings a degree of authority scarcely to be claimed, to a similar extent, at least, by any mere compilation—by any system of pathological and practical teaching based upon facts, however unexceptionable, which the author has not gathered